



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,157	08/08/2001	Aaftab A. Munshi	TMC# BEL-025	3088

20350 7590 10/25/2004

TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER

SIDDIQI, MOHAMMAD A

ART UNIT	PAPER NUMBER
----------	--------------

2154

DATE MAILED: 10/25/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/925,157

Applicant(s)

MUNSHI ET AL.

Examiner

Mohammad A Siddiqi

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-25 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grantham et al. (6,215,495) (hereinafter Grantham) in view of Using Oracle Jdeveloper and Business Components for Java with Oracle interMedia, February 2001, Oracle (hereinafter Oracle).
4. As per claim 1, Grantham discloses establishing rendering resources at a user site (col 4, lines 59-63);
transmitting a rendering request (col 4, lines 63-66) from the user site (col 4, lines 59-63) to a rendering service (server site, col 4, lines 59-

63), the user site being in communication with the rendering service (server site, col 4, lines 59-63) over a network (col 4, lines 59-63), the rendering request (col 3, lines 19-20) comprising identifiers (VRML file, col 4, lines 66-67) of rendering resources currently available at the user site required for a performing a rendering task (col 4, lines 66-67);

maintaining at the rendering service a resource pool (persistent objects, col 4, lines 50-55) comprising rendering resources from at least one previous rendering request from the user site (retransmit, col 4, lines 50-55);

comparing the rendering resources (comparing is done by traversing persistent objects, col 4, lines 50-55 and 29-37) in the resource pool (persistent objects, col 4, lines 17-21) with the identifiers of rendering resources currently available at the user site (col 5, lines 1-5); and

receives a given required resource from the user site (receives request as VRML file, col 4, lines 65-67) to the rendering service only if there is not a match between the resource pool and the user site for that required resource (VRML file, col 4, lines 65-67).

Grantham does not explicitly disclose uploading a given required resource. However, uploading and downloading file in an internet environment are well known in the art. Oracle, for example, discloses uploading a given required resource (page 8, line 7). It would have been obvious to one of ordinary skill

in the art at the time the invention is made to combine Grantham with Oracle. The motivation would have been to provide an interface to upload the data interactively.

5. As per claim 2, Grantham discloses the user site and the rendering service are located at different physical sites, and wherein the network comprises the Internet (106, fig 1, col 4, line 65).

6. As per claim 3, Grantham discloses the user site and the rendering service are colocated at the same physical site, and wherein the network comprises a local area network (col 5, lines 55-56).

7. As per claim 4, Grantham discloses the rendering service, generating the raw rendering resources to produce generated rendering resources (3-D, col 3, lines 65-67); and
providing the generated rendering resources to a rendering engine (205, fig 2, col 5, lines 27-33).

8. As per claim 5, Grantham discloses the rendering resources comprising scene description files, further comprising the step of manipulating a modeling application such that said scene description files comprise at least

one static (VRML, col 3, lines 65-67) scene description file and at least one dynamic scene description file (col 4, lines 1-5), whereby a statistical upload volume of scene description data is reduced (creation from VRML file to persistent object, col 3, lines 65-67 and col 5, lines 2-5).

9. As per claim 6, the claim is rejected for the same reasons as claim 1, above. In addition, Grantham discloses storing generated rendering resources corresponding to previous rendering requests in the resource pool (col 4, lines 50-55); and subsequent to said comparison step (comparing is done by traversing persistent objects, col 4, lines 50-55 and 29-37), generating a given raw resource into a generated rendering resource only if that raw resource required uploading for the rendering task (col 5, lines 1-15).

10. As per claim 7, Grantham discloses transmitting a session control file comprising the identities of each raw rendering resource file required for the rendering task (3-D scene, col 3, lines 65-67); transmitting at least one resource generation control file comprising associations among the raw rendering resource files and a plurality of generated rendering resource files corresponding thereto (relationship

amongst the component is in VRML files, col 3, lines 65-67 and col 4, lines 1-5); and

for each raw rendering resource file, performing; the steps of (i) forward-mapping (VRML file instructs the API, col 5, lines 2-5) that raw rendering resource file onto a set V of dependent generated rendering resource files using information derived from the resource generation control files (VRML to persistent objects, col 5, lines 1-15), (ii) reverse mapping (attributes of the object may be changed or missing can be routed and connected from the database, col 5, lines 40-46) each member of the set V onto a set W of raw rendering resource files using information derived from the resource generation control files (VRML to persistent objects, col 5, lines 1-15); and (iii) marking that generated rendered resource file for generation (persistent object, col 5, lines 1-7) (col 5, lines 50-55 and).

Grantham fails to disclose if (a) it does not exist in the resource pool or (b) any of the set W of raw rendering resource files required uploading for the rendering task. However, oracle discloses mapping (page 9, lines 26-33), if (a) it does not exist in the resource pool or (b) any of the set W of raw rendering resource files required uploading (upload class, page 9, line7) for the rendering task (page 9, lines 6-20). It would have been obvious to one of ordinary skill in the art at the time the invention is made to combine

Grantham with Oracle. The motivation would have been to provide web-based application to incorporate rich content.

11. As per claim 8, the claim is rejected for the same reasons as claim 1-5, above. In addition, Grantham discloses in that the static scene description files (VRML file, col 3, lines 65-67 and col 4, lines 1-8) will statistically be required for a lesser number of frames of the rendering task than the dynamic scene description files (col 4, lines 50-58).

12. As per claim 9, the claim is rejected for the same reasons as claim 2, above.

13. As per claim 10, the claim is rejected for the same reasons as claim 3, above.

14. As per claim 11, the claim is rejected for the same reasons as claim 4, above.

15. As per claim 12, the claim is rejected for the same reasons as claim 6, above.

16. As per claim 13, the claim is rejected for the same reasons as claim 7, above.

17. As per claims 14 and 15, claims are rejected for the same reasons as claim 1, above.

18. As per claim 16, the claim is rejected for the same reasons as claim 4, above.

19. As per claim 17, the claim is rejected for the same reasons as claim 5, above.

20. As per claim 18, the claim is rejected for the same reasons as claim 7, above.

21. As per claim 19, the claim is rejected for the same reasons as claim 1, above.

22. As per claim 20, the claim is rejected for the same reasons as claim 4, above.

23. As per claim 21, the claim is rejected for the same reasons as claim 5, above.

24. As per claim 22, the claim is rejected for the same reasons as claim 6, above.

25. As per claim 23, the claim is rejected for the same reasons as claim 7, above.

26. As per claim 24, the claim is rejected for the same reasons as claim 2, above.

27. As per claim 25, the claim is rejected for the same reasons as claim 3, above.

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Pub US 2004/0100465 teaches image processing.

An Efficient Library for Parallel Ray Tracing and Animation by

John Edward Stone, 1998, University of Missouri.

U.S. Patent 6,618,046 teaches rendering cost estimation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad A Siddiqi whose telephone number is (703) 305-0353. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MAS

